Annual Report Department of Public Services Fiscal Year 2004 Michael P. Collins, P.E., Director

At the end of last fiscal year, we hoped for funding for cut positions to be restored and we hoped for an easy winter. Clearly, neither happened. We continue to operate at greatly reduced staffing levels and the backlog of requests for work is getting formidable.

The '03-'04 Winter got off to a healthy start with nearly three feet of snow in a single weekend. We then entered into the coldest winter in recent memory. Water services with a full five feet of cover froze in some spots. Several small leaks surfaced every day and we had to pound through four feet of frost to fix the pipes. It has been many years since we have had an easy winter. I think we have paid our dues.

Our maintenance division continues to get smaller, while our list of responsibilities continues to grow. We took over as advisors to all City Departments in relation to building maintenance. We have also been able to fix some long-standing deficiencies at many City owned properties. A large room at the North Beverly Fire House was previously unusable due to its condition and the fact that the room could not be heated sufficiently due to ill-fitting windows. Employees from the Public Services Dept restored the room to a level not seen in several decades. The maple flooring was uncovered and refinished and all second floor windows were replaced. The energy savings in this building should prove to be substantial. The same staff also gutted and replaced the bathroom in the buildings living quarters. For the first time, Fire Dept personnel can take a shower after a fire. The Department also managed the removal of asbestos throughout the building and coordinated the replacement of the oil storage tanks that appeared to be in danger of failing.

All of these measures resulted in a significantly improved work environment as well as real savings in heating fuel and eliminated the possibility of a very expensive oil spill. We hope to continue scrutinizing other City owned buildings and making similar improvements in the coming years.

Our fleet continues to age with no signs of replacement on the horizon. It is getting difficult and expensive to keep up with the needed repairs. Fortunately, we have a talented group of mechanics that have dealt well with the constant flow of repairs. It should be noted that our newest large truck is now ten years old and well beyond a normal replacement interval. Many vehicles are closer to twenty years old and are difficult to keep operating at peak efficiency. At some point in the near future, we need to start replacing much of the fleet.

We have made many small improvements in the Water Dept that have resulted in large gains in productivity. By consolidating our meter reading routes, we have shaved days off the time required to read. By modifying procedures for processing the reads, we have saved several hours per cycle in the billing process. These savings have allowed staff more time to fix lingering problems and become more efficient. It is imperative that our meter reading and billing be as accurate and timely as possible to provide a constant stream of revenue and equitable billing for our customers.

Our mandate is to provide safe drinking water at sufficient volumes at all times. A cold night in February proved the Departments resolve. A twenty-inch water main ruptured pouring 13,000 gallons per minute onto Conant St. The resulting pressure drop saw most of the City with very low pressure and large sections with no water at all. Adding to the urgency, the hospital had no water on the top floors and was contemplating evacuation. Crews quickly responded from their homes at the first sign of trouble and had controlled the situation to the point that, within twenty minutes, the pressure throughout the City was near normal. City staff worked through the night in sub-freezing weather to repair the main before sunrise. This could have been a major problem for the City, but because we were prepared and because of the dedication of the employees, a serious situation was controlled and dealt with efficiently.

Much of what the Public Services Department does is a matter of public safety. The Department provides the hydrants and water to fight fires, we maintain the street signs and lines to control traffic, we plow the streets so that emergency vehicles can freely move about in the winter, we provide the drainage system that keeps the streets from flooding and forcing people from their homes. We also have to protect our environment.

To that end, we have the most aggressive leak detection program of any city with near constant surveillance. The results speak for themselves. We have reduced water consumption every year by tens of millions of gallons for the past five years. We have kept the City's catch basins clean thus preventing sediment form filling in streams and wetlands. We have switched to non-toxic, non-corrosive liquid deicers for winter operations. We continue to use natural and organic fertilizers for our turf. We are sensitive to the needs of our environment and operate in a manner that balances those needs with all other factors.

The Forestry and Grounds Division continues to improve our parkland into the nicest on the North shore. This year saw the completion of new play structures at Gillis, Holcroft and Cahill parks. New trees were planted around City Hall as part of an overall beautification. We continue to be recognized as a "Tree City USA," by the National Arbor Day Foundation. It is my belief that our Forestry and Grounds division is the largest group of highly skilled staff under any umbrella, public or private. That is not to say it is a large group, but the employees we do have are the best in the business. I think our parks reflect that.

The Highway Division bears the brunt of the yeoman's work. Operating with 40% fewer staff than a few years ago, they continue to do the best job they can with the resources available. In years past, we were able to do both routine maintenance like potholes and street sweeping, while also making drainage improvements and sidewalk repairs. Now we can do one or the other. As a result, we are getting way behind and have a significant backlog of projects to accomplish. Many are small and take only a day or two, but that is a day or two we can't do anything else. I am grateful for the hard work and excellent results of the Division given their limited resources.

Again, we hope to have funding restored to previous levels, which would allow us to bring hire additional staff and purchase sufficient supplies. Maybe this winter will be the easy one.

The following is a breakdown of each division's activities this past year.

Water Department:

At this point, the Water Department has flushed 2/3 of the City's hydrants this year. We have greased or repaired 45 of these hydrants and replaced 38. The flushing program is the best way to identify faulty hydrants and to ensure the highest water quality.

There have been 123 service leaks that were repaired by renewing the entire service to the property line.

Six gate replacements.

7 main breaks including twenty inch main on Conant St.

17 scheduled service renewals.

During the past winter, 35 services froze and had to be thawed. 11 had to be dug in order to thaw them out due to very long services or other problems.

Considerable time was spent marking our mains for other contractors. We spent many hours investigation customer complaints for billing questions and other issues. With constant activity in the City, we were quite busy assisting other contractors expanding private services or repairing our services that we damaged accidentally.

All water meters have now been replaced and are being read by radio receivers mounted in a van. Each month some 20-30 meters require some sort of investigation or repair.

We continue to upgrade and repair our 35 pump stations.

Gardener St and Lawnbank Rd water mains were replaced and all services renewed.

Highway Department:

Masonry Work:

Rebuild (2) catch basins on Fieldstone Lane

Rebuild drain manhole and catch basin at Federal and Rantoul Street

Replace catch basin Woodbury Street (#27)

Rebuild headwall on Yale Boulevard drain

Remove and replace drain manhole and catch basin on Lothrop Street

Rebuild catch basin on Holding Street opposite Pinehurst Road

Rebuild catch basin at corner of Cabot and Charnock Street

Rebuild catch-basin Parramatta Road for paving project

Remove and replace (2) catch basins on Hale Street for paving project

Rebuild and relocate catch basin at corner of Cross Street and East Lothrop Street

Repair wall at corner of East Lothrop and Parsons Drive

Build drain manhole and reconnect drain line at #90 Bisson Street

Repair wall at #2 Brookhead Avenue

Rebuild catch basin at Colon and Essex Street

Remove and reset sewer manhole (frame and cover) Locust Street

Rebuild wall and replace road - #218 Common Lane

Rebuild catch basin at 125 Common Lane

Rebuild (2) catch basins on Cumnock Street

Remove old and install new precast catch basin

Remove old and install new precast catch basin at corner of West Dane and Chase Street

Rebuild catch basin at #30 Roderick Avenue

Rebuild headwall at Tozer Road – RR crossing and pour new invert for pipe junction

Rebuild catch basin at corner of Dane and Knowlton

Rebuild double catch-basin on Sunday Drive

Rebuild catch basin #6 Paradise Road

Rebuild catch basin at #10 Sohier Road

Rebuild (2) catch-basins @ #1 and #2 Middle Street

Rebuild catch basin at #20 Belmont Street

Drainage:

Remove 40'-36" CMP drainpipe at 103 Elliott Street – replace with 42" RCP and new drain manhole

Install new catch basin at corner of Guild and Winslow - precast and 3' pipe

Install 40' drain pipe and catch-basin at #40 Cross Street

Repair 10" drain line in 3 places on Bisson Street – 20' of 10" pipe

Repair drain and tie sewer connection into sewer main that was tied into drain at #1 Middle Street

Pump down water and plug abandoned sewer manhole at 13 Kennedy Drive

Install new catch basin and 20' pipe at 36 Brimbal Ave

Clean and flush drain culvert under Grover Street near town line

Repair (replace and relay) 16'-8" PVC pipe catch-basin – catch-basin at Cabot Street (Carrol's Florist)

Build new drain manhole at RR – Thissell Street for new 24" RCP drain

Rebuild drain manhole at RR – Thissell Street to temporary connect 24" RCP to 18" drain

Repair and replace 50'-10" drain line at end of Congress Street

Install new drain manhole and (2) catch basins with 35' of 10" PVC on Bisson Street at corner of Locust Street

Install 184'-10" PVC drainpipe and (1) drain manhole at 15 Fossa Terrace to Bartlett Gardens playground

Sidewalks:

Pave sidewalk at # 23 Woodbury Street

Two driveway aprons and repave at #27 Woodbury Street

Build (2) handicap ramps (for crosswalk) for playground at Porter Street

Remove tree stump (LG), reset granite curb and pave sidewalk at #25 Bow Street

Two driveway aprons and repave #27 Woodbury Street

Sewer Repairs:

Flush and degrease sewer connection to Commodore Plaza

Repair 26' sewer connection to house #215 Bridge Street

Repair sewer (2-"Y's" and 2 connections) at 106 Lovett Street

Remove and relay sewer connection at #10 Stone Street (23' pipe)

Repair sewer main collapsed (12'-8" pipe) – Prescott Street at pump station

Build-up tables – (2) manholes on Enon Street to improve sewer flow

Install new house sewer connection to #16 Guild Road (12'-6" PVC pipe)

Road Construction

Dig-out sink holes on Driscoll Lane and 29 Kennell Hill Drive

Delivered 1400' granite curb to Balch Street

Remove curbs for driveway cuts at: 15 School Street

Central Street – Corner Lovett Street

59 Lothrop Street 40 Pleasant Street

Loan and seed behind new granite curbing (1400') on Balch Street

Cut out hot top at Kittredge Crossing along track rails and repave entire crossing

Repair 20" water main - then repair street using 30-tons of asphalt

Mapped several miles of drainage system for GIS datalayer

Oversaw the construction of several sidewalks by contractors

Paved the following streets:

Endicott St

Pinehurst Ave Doane Ave Roderick Ave Harris St Livingstone Ave Winslow Rd fully reconstructed Colon St still needs finish top Hale St from Dane to Lothrop Winter St Dane St from Knowlton to Hale Brimbal Ave from Herrick to #133 Bayview Ave Neptune St from Ober to Bayview Parramatta Rd from Sylvan to East Lothrop Iverson Rd from Parramatta to dead end Cross St from Ray to Lakeshore

Holding St

Building and Maintenance Department:

City Road Paint: crosswalks – arrows – gores – T's and L's – RxR's – Edge Lines

292,333' Double Yellow Center Lines: 86,964' 4" Edge Lines: RxR's 36 Square Feet Green: 48,584' Square Feet White 12" 33,894' 58 Arrows: Parking T's 138 4" L's 87

Repair fencing Lynch Park and Central Cemetery

Install benches (9) at Goat Hill

Install picnic tables (9) at Goat Hill

Install playground equipment at Centerville Playground

Install playground equipment at Gillis Park

Install benches (4) at Dane Street Beach

Continue traffic sign project citywide

Build cabinets at Park St office

Repair playground equipment citywide

Replace front entry at garage - 148 Park Street

Repair wood trim around 148 Park Street buildings

Start refurbishing of North Beverly Fire Station

Renovate Lynch Park building

Replace rear and side doors at 148 Park Street

Scrape and paint cemetery fences (with state)

Repair library due to water damage

Repair citywide plow damage

Repair air-conditioning units at Senior Center

Repair damage from flooding at Senior Center

Build new report room for police station

Removal of animals killed by cars citywide

Repair parking meters

Minor repairs to city plumbing and heating

Citywide pickup of hazardous units

Installation and removal of voting machines and booths

Installation of citywide traffic signs

Park Department:

Three (3) man sports turf maintenance and grooming crew

Four (4) man cutting crew

Two (2) men missing due to budget

Sports Turf Crew: Responsible for maintenance and renovations to turf which include

the following: Maintaining 20 athletic fields, edging, field lining,

seeding/sodding, fertilization, aeration, Integrated Pest

Management (IPM)

Cutting Crew: Responsible for maintaining all public areas which include ball

fields, parks, traffic islands and veteran monuments

Crew manages approximately 130 acres (not including school

properties)

Other jobs include trash removal, landscaping and mulching

Tree Department:

Three (3) man crew ((2) certified arborists)

Completed over 100 resident requests

Removed approximately 30 to 40 hazardous trees

Planted 140 trees – 42 trees from a Mass Re-leaf Grant of \$5,000

Balance of time spent pruning and maintaining trees

Projects Completed:

Contributed to the renovation of Cahill Park (loam, hydro seed, planted trees, new fencing)

Contributed to the renovation of Gage Playground and Gillis Park (playground structures and benches)

Aerated, seeded, and fertilized parks and ball fields

Inspected and repaired fencing in City parks

Re-sodded center of Hurd Stadium

Transplanted a large, donated spruce tree from Lothrop Street to Lynch Park

Landscaped Thorndike Street side of City Hall